I claim:

1. A method for locating at least one RF tag, comprising the steps of:
   (a) a locating device having means for identifying said at least one RF tag,
   (b) transmitting a directional transmit command signal to said at least one RF tag by using said locating device, wherein said locating device includes a directional antenna,
   (c) said at least one RF tag is waiting to receive said transmit command signal,
   (d) receiving said transmit command signal, by said at least one RF tag, and transmitting, by said at least one RF tag, at least one response signal in synchronization with said transmit command signal,
   (e) receiving said at least one response signal, by said locating device.
2. The method of claim 1, further comprising the step of:
   (f) said locating device measuring round trip delay and amplitude of said at least one received response signal.
3. The method of claim 2, wherein said directional transmit command signal is directional wide band transmit command signal and said response signal is wide band response signal.
4. The method of claim 3, further comprising the step of converting said round trip delay and amplitude to distance and directional information and displaying said distance and directional information on a display controller.
5. The method of claim 3, wherein said means for identifying said at least one RF tag are selected from the group consisting of: identification number, and serial numbers, and all available RF tags, selecting some of said all available RF tags by using input means, and group number, and features of said at least one RF tag.
6. The method of claim 3, wherein said round trip delay and amplitude measuring of said at least one received response signal are used for locating said at least one RF tag.

7. The method of claim 3, wherein said means for identifying said at least one RF tag identifying a predefined group of RF tags.
8. The method of claim 3, further comprising the step of forwarding the measured round trip delay and amplitude of said at least one received response signal to a display controller.
9. The method of claim 8, wherein said amplitude is selected from the group consisting of: amplitude of the first Multipath component, and amplitude of a predefined component, and amplitude resulted by applying a function on the measured Multipath components.
10. The method of claim 3, further comprising the step of delivering the measured round trip delay and amplitude of said at least one received response signal to an operating system, wherein said operating system is operating said locating device.
11. The method of claim 3, wherein the power of said directional transmit command signal can be configured by a user.
12. The method of claim 3, wherein said means for identifying said at least one RF tag is accomplished by using a device selected from the group consisting of: numeric pad, optical reader, RF receiver, preprogrammed memory.
13. The method of claim 3, wherein the step of said at least one RF tag is waiting to receive said transmit command signal includes said at least one RF tag is scanning in the time domain, and whenever said at least one RF tag is not transmitting or receiving signals, it is deactivated into a sleep mode where it is activated periodically with a predefined duty cycle.
14. The method of claim 3, wherein the step of said at least one RF tag is waiting to receive said transmit command signal includes said at least one RF tag is scanning in the frequency domain by sweeping a center frequency in predefined steps in order to cover a desired frequency range until said wide band transmit command signal is detected.
15. The method of claim 3, wherein the step of transmitting, by said at least one RF tag, at least one wide band response signal in synchronization with said wide band transmit command signal, includes: transmitting, by said at least

one RF tag, according to a predefined logic, at least one wide band response signal in synchronization with said wide band transmit command signal.

16. The method of claim 3, wherein said at least one wide band response signal is transmitted on the same channel of said wide band transmit command signal.

17. The method of claim 3, wherein at least one RF tag having means for determining the identification of said locating device and responding only to at least one predefined locating device.

18. The method of claim 3, wherein the measured round trip delay of said at least one received wide band response signal is determined by subtracting a predetermined correction factor from the measured time between the transmission of said wide band transmit command signal and receiving of said wide band response signal, whereby said predetermined correction factor compensates for a predefined time delay of said at least one RF tag between receiving said wide band transmit command signal and transmitting said wide band response signal, and a predefined time delay of said locating device operation.

19. The method of claim 3, wherein said locating device comprising means for overcoming a Multipath effect.

20. The method of claim 19, wherein said means for overcoming a Multipath effect measuring the delay of the first Multipath component.

21. The method of claim 3, wherein the collision probability between a plurality of RF tags is reduced by said locating device transmitting at least one additional directional transmit command signal.

22. The method of claim 21, wherein the RF tag stop answering said transmit command signal from said locating device after said RF tag responded a predetermined number of times in a predetermined duration.

23. The method of claim 22, wherein said RF tag resume responding to said transmit command signal from said locating device by a condition selected from the group consisting of a predetermined duration past since last response, and the receive power has been changed by more than a predefined value.

24. The method of claim 3, wherein said wide band transmit command signals and wide band response signals includes pulse signals having pulses separated by no-energy periods.

25. The method of claim 3, wherein said wide band transmit command signals and wide band response signals featuring a bandwidth of about 50 MHz centered at about 2440 MHz

26. The method of claim 21, wherein said locating device increasing the repetition frequency of said at least one additional directional transmit command signal when detecting fast changes in the received power of the response, and reducing the repetition frequency of said at least one additional directional transmit command signal when detecting stable power of the response.

27. A method for locating at least one RF tag, comprising the steps of:
    (a) transmitting a directional transmit command signal to said at least one RF tag by using a locating device, wherein said locating device includes a directional antenna,
    (b) said at least one RF tag is waiting to receive said transmit command signal,
    (c) receiving said transmit command signal, by said at least one RF tag, and transmitting, by said at least one RF tag, at least one response signal in synchronization with said transmit command signal,
    (d) receiving said at least one response signal, by said locating device,
    (e) using said at least one response signal for locating said at least one RF tag.

28. The method of claim 27, wherein said locating device measuring round trip delay and amplitude of said at least one received response signal.

29. The method of claim 28, wherein said round trip delay and amplitude measuring of said at least one received response signal are used for locating said at least one RF tag

30. The method of claim 28, further comprising the step of displaying the measured round trip delay and amplitude of said at least one received response signal on a display controller.

31. The method of claim 28, further comprising the step of converting said measured round trip delay and amplitude to distance and directional information.

32. The method of claim 31, further comprising the step of displaying said distance and directional information on a display controller.

33. The method of claim 28, wherein the collision probability between a plurality of RF tags is reduced by said locating device transmitting at least one additional directional transmit command signal.

34. A device for locating at least one RF tag, comprising:

(a) a directional antenna,

(b) a reader,

(c) a display controller,

(d) a display device,

wherein said reader is transmitting a message to said at least one RF tag by using said directional antenna, and said at least one RF tag is transmitting an answer in synchronization with said reader, and said reader is receiving said answer from said at least one RF tag and is measuring a round trip delay and an amplitude of the received radio signal, and said reader forwarding said measured round trip delay and said amplitude to said display controller controlling said display device.

35. The device of claim 34 wherein said display controller and said display device are implemented in one integrated display and control device.

36. The method of claim 34, wherein said directional antenna can be folded whenever said locating device is not in use.

37. The device of claim 34 wherein a user manually points said device to the direction of maximum received signal amplitude.

38. The device of claim 34 wherein a user receives feedback regarding said at least one RF tag location by audio means.

39. The device of claim 34 wherein a user receives feedback regarding said at least one RF tag location by visual means.

40. The device of claim 34 wherein a user receives feedback regarding said at least one RF tag location by audio and visual means.

41. The device of claim 34 wherein said device is used by an electronic system and said measured round trip delay and said amplitude are delivered to an operating system of said electronic system.

42. The device of claim 34 wherein said directional antenna is a Monopulse type antenna including at least two spatially separated directional antennas.